



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,547	06/14/2001	Yu-Li Chang	S01.12-0712	6844

27365 7590 04/18/2005

SEAGATE TECHNOLOGY LLC C/O WESTMAN
CHAMPLIN & KELLY, P.A.
SUITE 1600 - INTERNATIONAL CENTRE
900 SECOND AVENUE SOUTH
MINNEAPOLIS, MN 55402-3319

EXAMINER

KLIMOWICZ, WILLIAM JOSEPH

ART UNIT	PAPER NUMBER
----------	--------------

2652

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/881,547

Applicant(s)

CHANG ET AL.

Examiner

William J. Klimowicz

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19, 20 and 23-31 is/are pending in the application.
- 4a) Of the above claim(s) 2-5, 8, 10, 12 and 13 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6, 7, 14-17, 19, 20, 23-28 and 31 is/are allowed.
- 6) ☒ Claim(s) 1, 9, 11, 29 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6-29-04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Status

Claims 1-17, 19, 20 and 23-31 are currently pending.

Claims 18, 21 and 22 have been cancelled by the Applicants.

Claims 2-5, 8, 10, 12 and 13 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a non-elected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 8, filed April 28, 2003.

Claim Objections

Claim 31 is objected to because of the following informalities:

With regard to claim 31 (line 1), the phrase "The assembly of claim 23" should be changed to the preamble phrase --The combination of claim 23-- in order to remain consistent with the preceding preamble claim language. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 9, 29 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshizawa et al. (JP 2-50379 A).

Art Unit: 2652

As per claim 1, Yoshizawa et al. (JP 2-50379 A) discloses an assembly (FIG. 1) comprising: at least one disc (1); a spindle assembly (2) rotationally supporting the at least one disc (1) to form a flow field along a surface of the at least one disc (1) via rotation of the at least one disc (1); a head assembly (4) positionable proximate to the surface of the at least one disc; and a flow controller (7) supported in the flow field along the disc surface and the flow controller (7) (comprising a flow device (13)) including a flow gate having a leading edge (edge at which airflow enters vent (12) - see FIG. 2) having a plurality of rows (air inflow end of radial rows (12)) of radially spaced inlets (three inlets designated at dashed lines (12) in FIG. 2 which are indeed spaced along the disc radius) and a trailing edge (edge at which airflow exits vent (12) - see FIG. 2) including a plurality of rows of radially spaced outlets (three at trailing edge which correspond to the dashed lines (12) from leading edge to trailing edge as seen in FIG. 2 which are indeed spaced along the disc radius) and including a plurality of radially spaced streamline flow passages (12) between the plurality of rows of radially spaced inlets at the leading edge and the plurality of rows of outlets at the trailing edge. It is noted that the streamline flow passages are factually spaced along the disc radius as can be readily seen in the dashed lines of FIG. 2 connecting the radially spaced inlets and corresponding radially spaced outlets.

As per claim 9, wherein the flow gate (7) includes a block structure (7) including the leading edge and the trailing edge having the plurality of rows of radially spaced inlets formed along the leading edge of the block (7) and the plurality of rows of radially spaced outlets formed along the trailing edge of the block and the plurality of radially spaced streamline flow passages (12) therebetween - as is readily seen in FIG. 2.

Art Unit: 2652

As per claim 29, the plurality of radially spaced streamline flow passages (12) include a constant cross-sectional area or dimension between the plurality of inlets and the plurality of outlets - see FIG. 2.

As per claim 30, wherein the flow gate (7) is positioned between an inner and outer diameter of the at least one disc (1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshizawa et al.

(JP 2-50379 A).

See the description of Yoshizawa et al. (JP 2-50379 A), *supra*.

As per claim 11, Yoshizawa et al. (JP 2-50379 A) discloses a width of the flow controller (7) as extending between inner and outer positions of the head assembly to condition flow to the head assembly (e.g., see *inter alia*, FIGS. 1, 3 and 4).

As per claim 11, however, Yoshizawa et al. (JP 2-50379 A) does not expressly show wherein the head assembly (4) is pivotally supported to move between an inner position and an outer position.

Art Unit: 2652

Official notice is taken that pivotally mounted head assemblies are notoriously old and well known in the art.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the disc drive of Yoshizawa et al. (JP 2-50379 A) with a pivotally mounted head assembly, as is common in the art.

The rationale is as follows: It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the disc drive of Yoshizawa et al. (JP 2-50379 A) with a pivotally mounted head assembly, as is common in the art, in lieu of a linear actuator, in order to reduce the size of the disc drive, by allowing the actuator assembly to be moved closer to the disc via pivotal attachment of an actuator bearing, such advantages of pivotal mounting being well known, established and appreciated in the disc drive art.

Response to Arguments

Applicants' arguments filed December 9, 2004 as it pertains to claims rejected under Yoshizawa et al. (JP 2-50379 A) have been fully considered but they are not persuasive.

The Applicants state:

As previously discussed, claims 1 and 9 recite *inter alia* a plurality of rows of radially spaced inlets and a plurality of rows of radially spaced outlets and a plurality of rows of radially spaced streamline flow passages. As interpreted based upon customary meaning, the plurality of rows of radially spaced streamline flow passages is not taught by the single row of venting holes 12 on outer spoiler teeth (13), (1) and (8) of Yoshizawa.

See page 10 of Applicants' response (filed December 9, 2004).

Art Unit: 2652

As articulated in great detail in the Examiner's rejection, *supra*, Yoshizawa et al. (JP 2-50379 A) discloses a flow gate having a leading edge (edge at which airflow enters vent (12) - see FIG. 2) having a plurality of rows (air inflow end of radial rows (12)) of radially spaced inlets (three inlets designated at dashed lines (12) in FIG. 2 which are indeed spaced along the disc radius) and a trailing edge (edge at which airflow exits vent (12) - see FIG. 2) including a plurality of rows of radially spaced outlets (three at trailing edge which correspond to the dashed lines (12) from leading edge to trailing edge as seen in FIG. 2 which are indeed spaced along the disc radius) and including a plurality of radially spaced streamline flow passages (12) between the plurality of rows of radially spaced inlets at the leading edge and the plurality of rows of outlets at the trailing edge. It is noted that the streamline flow passages are factually spaced along the disc radius as can be readily seen in the dashed lines of FIG. 2 connecting the radially spaced inlets and corresponding radially spaced outlets.

Allowable Subject Matter

Claims 6, 7, 14, 17, 19, 20, 23-28 and 31 are currently allowed. Additionally, previously withdrawn claims 15 and 16 are also allowed since they depend from an allowed claim (claim 14).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

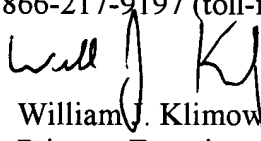
Art Unit: 2652

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Klimowicz whose telephone number is (571) 272-7577. The examiner can normally be reached on Monday-Thursday (6:30AM-5:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


William J. Klimowicz
Primary Examiner
Art Unit 2652

Application/Control Number: 09/881,547

Page 8

Art Unit: 2652

WJK